Abstract of the Disclosure

A central processing unit (CPU) for easily testing and debugging an application program, which includes a data communications unit for performing data communications with a host computer, a status register having a flag representing whether an operational mode of the CPU is a general operational mode representing a general operational state or a debugging mode representing a debugging state, a debugging stack pointer register which is used as a stack pointer designating a stack memory storing data of a debugging program, and a comparator for comparing a value stored in a break register with break data, wherein the CPU is converted into the debugging mode if the break register value is same as the break data, the flag of the status register has a value representing a debugging mode, a start address for performing a debugging program is loaded in a program counter, and the debugging program is executed to perform a debugging according to a command from the host computer via the data communications unit.